REMARKS

Claims 1-4, 6-14 are pending in the application. Claim 15 is added.

Rejections – 35 USC § 101

The Examiner rejected claims 1-4, 6-14 under 35 USC § 101, because the claimed invention is directed to non-statutory subject matter-abstract method that manipulates data.

The present application teaches a method for mapping data into a multi-spline model which simulates an organ. An example is provided on page 11, lines 2-5: "If the model is of a simulated organ with a tool being inserted therein, the direction of navigation is preferably based upon the direction of the tip of the tool being introduced into the model, such as an endoscope, a catheter or any other flexible tool". Claim 1 is amended to incorporate the teaching of organ simulation in the present application.

The present application further teaches a method for mapping data according to a time parameter, and transmitting only required data to a user of a networked computer. Thus the user always receives locally only the essential data required by him, which significantly reduces the volume of transmitted data, and the amount of time required to transfer the data. The present invention describes on page 5 lines 4-5:" Three dimensional data can be mapped to a model in which one dimension is time. Such data is then transmitted only as required to the user". An example is provided on page 11, lines 17-20: "when the user navigates along the spline and advances in time, the data is sent to the user by a server according to that time. Only three dimensional data

that is mapped to the relevant time is transmitted, so the user always receives locally only the required data".

New claim 15 is added to define a method, in accordance with the above teaching, for mapping data according to a time parameter, and transmitting only data that is required by a user of a networked computer to the networked computer.

Claim 1 defines a method for mapping data to a multi-spline model, the data being expressed in spatial coordinates. The method comprising: constructing a single multi-spline tree from a plurality of splines, *the multi-spline tree simulating an organ*, the constructing comprising: determining a root node, determining a distance between a new spline and existing splines in the tree, locating the new spline on a branch of the tree, in an appropriate location with regard to a time parameter of the new spline, and expanding the branch according to a derivate of the branch and the new spline. The method further comprises: converting a spatial coordinate of the data to a time-based coordinate, and mapping each point of the data to a point on the multi-spline model at least partially according to the time-based coordinate.

Thus Claim 1 is limited to a practical application, namely, to the simulation of an organ, and interaction between a tooltip and the organ, and therefore constitutes statutory subject-matter according to 35 USC 101.

Claim 15 defines a method for mapping data to a multi-spline model, the data being expressed in spatial coordinates, the method comprising: constructing a single multi-

spline tree from a plurality of splines, the constructing comprising: determining a root node, determining a distance between a new spline and existing splines in the tree, locating the new spline on a branch of the tree, in an appropriate location with regard to a time parameter of the new spline, and expanding the branch according to a derivate of the branch and the new spline. The method further comprises: converting a spatial coordinate of the data to a time-based coordinate, mapping each point of the data to a point on the multi-spline model at least partially according to the time-based coordinate, and transmitting only spatial data that is mapped to a relevant time, the relevant time being required by a user of a networked computer, to the user. Thus Claim 15 is limited to a practical application, namely, to the saving of network bandwidth when spatial data is transferred to a networked computer, by transmitting only data that is relevant to specific time points being required by the user of the networked computer. Claim 15 therefore constitutes statutory subject matter according to 35 USC 101, and should be allowed

It is respectfully maintained that in light of the above explanations and amendments, the claimed invention is directed to statutory subject matter, as it is limited to practical applications, namely, to the simulation of an organ, and to the saving of network bandwidth when spatial data is transferred between networked computers.

The remaining claims mentioned in this section of the Office Action are believed to be allowable as being dependent on an allowable main claim.

All of the matters raised by the Examiner have been dealt with and are believed to have been overcome.

In view of the foregoing, it is respectfully submitted that all the claims now pending in the application are allowable.

An early Notice of Allowance is therefore respectfully requested.

Respectfully submitted,

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